## **EMC Components**

### Ferrite Beads SMD

TDK has manufactured MPZ2012 type as EMI countermeasure product for power line, and now maximizes impedance to  $600\Omega$  (at 100MHz) and rated current to 1A, while minimizes Rdc under  $150m\Omega$  as 1608 type.

#### **FEATURES**

- This type is the best for energy-saving in the low DC resistance.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

#### **APPLICATIONS**

Noise suppression of personal computers, USB/IEEE1394 interfaces, HDDs, CD-ROMs, DVDs, DSCs, LCD panels, cellular phones, etc.

#### PRODUCT IDENTIFICATION

MPZ	1608	S	221	Α	Т
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series name
- (2) Dimensions L×W
- (3) Material code
- (4) Nominal impedance221: 220Ω at 100MHz
- (5) Characteristic type
- (6) Packaging style

T: Taping

#### **ELECTRICAL CHARACTERISTICS**

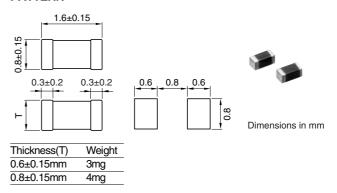
Part No.	Impedance	DC resistance	Rated current*	Thickness
	$(\Omega)[100MHz]$	$(\Omega)$ max.	(A)max.	(T)mm
MPZ1608S300A	30±10Ω	0.01	5	0.6
MPZ1608S600A	60±25%	0.02	3.5	0.6
MPZ1608S101A	100±25%	0.03	3	0.6
MPZ1608S221A	220±25%	0.05	2	0.8
MPZ1608R391A	390±25%	0.12	1.2	0.8
MPZ1608S601A	600±25%	0.15	1	0.8
MPZ1608Y600B	60±25%	0.03	2.3	0.8
MPZ1608Y101B	100±25%	0.05	2.0	0.8
MPZ1608Y151B	150±25%	0.07	1.8	0.8
MPZ1608D300B	30±10Ω	0.07	1.8	0.8
MPZ1608D600B	60±25%	0.12	1.2	0.8
MPZ1608D101B	100±25%	0.15	1.0	0.8

Please refer to the graph of RATED CURRENT vs. TEMPERATURE CHARACTERISTICS(DERATING) about the rating current at 85°C or more in temperature of the product.

### MPZ Series MPZ1608 Type

Size: JIS/IEC 1608, EIA 0603

# SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



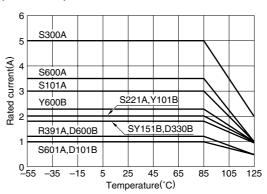
#### **TEMPERATURE RANGES**

Operating/storage	–55 to +125°C	

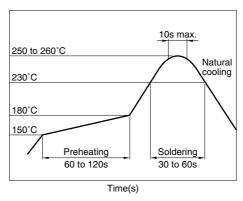
#### **PACKAGING STYLE AND QUANTITIES**

Packaging style	Quantity
Taping	4000 pieces/reel

# RATED CURRENT vs. TEMEPERATURE CHARACTERISTICS (DERATING)



# RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- Please contact our Sales office when your application are considered the following:

  The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

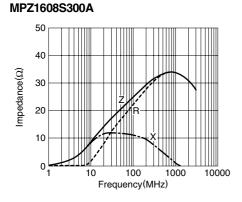
## **EMC Components**

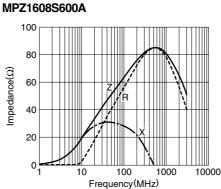
## Ferrite Beads SMD

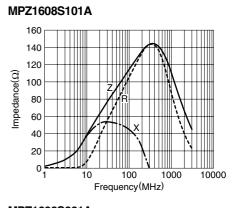
## MPZ Series MPZ1608 Type

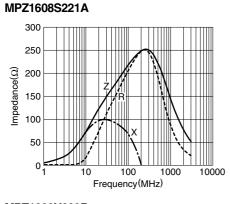
Size: JIS/IEC 1608, EIA 0603

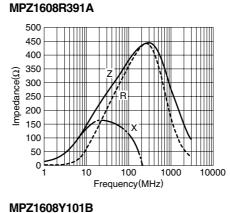
# TYPICAL ELECTRICAL CHARACTERISTICS Z, X, R vs. FREQUENCY CHARACTERISTICS

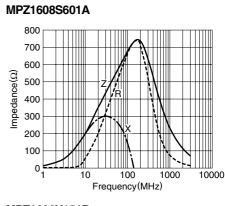


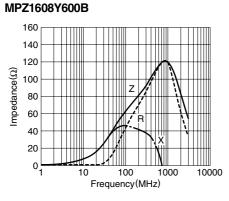


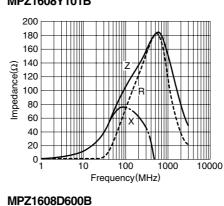


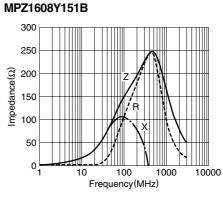


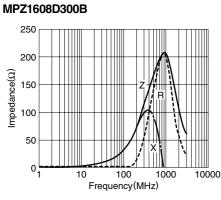


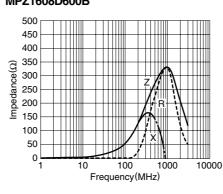


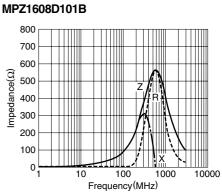












<sup>•</sup> All specifications are subject to change without notice.